

U.S. — Canada Symposium on North American Climate Change and Weather Extremes

In partnership with Environment Canada and the U.S. National Weather Service, EPA's Global Change Research Program conducted a three-day symposium in Atlanta in October entitled "North American Climate Change and Weather Extremes."

The objectives of the symposium were to:

- P** review current capacities for identifying weather extremes in the climate system;
- P** assess current understandings of the relationships between weather extremes, climate variability, and climate change;
- P** examine the vulnerabilities of American and Canadian societies to weather and climate extremes; and
- P** determine what steps are required to advance climate modeling capabilities to mitigate societal vulnerabilities.

The first day was kicked off with keynote addresses from Gordon McBean (Assistant Deputy Minister) of Environment Canada and Bill White (Special Adviser to the Administrator) of EPA. Three plenary sessions followed, focusing on 1) Current capabilities for identifying weather extremes in the climate system with papers by David Easterling (NOAA/NCDC) and Bill Hogg (Environment Canada); 2) Extreme weather in the context of climate change with papers by Mike Schlesinger (U. of Illinois) and Francis Zwiers (Environment Canada); and 3) An introduction to society's vulnerabilities to weather extremes with papers by Mary Fran Myers (U. of Colorado) and David Etkin (Environment Canada).

Day two of the conference moved into break-out sessions designed to prompt discussion on issues related to extreme weather events and their implications for water supplies, air quality, human health, and infrastructure. The North American chapter of the 1998 IPCC Regional Assessments, the Canada Country Study, and deliberations within the US National Assessment process

identified these four areas as being particularly vulnerable to extreme events in the context of climate change and as being likely to benefit from more and/or better information. In each session, 2-3 discussants presented short papers to stimulate and focus the discussion. Each group was asked to identify important information gaps and near- and longer-term research needs related to extreme weather events.

The plenary sessions on day three benefitted from and elaborated on the day two discussions. The sessions focused on 1) Advances in impacts and vulnerability modeling with papers by Linda Mearns (NCAR) and Roger Street (Environment Canada); 2) Advances in global and regional climate modeling with papers by Eric Barron (Pennsylvania State University) and Ian Rutherford (Canadian Institute for Climate Studies); and 3) Advances in computer speed and architecture with papers by Bill Buzbee (Arctic Region Supercomputer Center & Buzbee Enterprises LLC) and Michel Valin (AES).

Presentations and discussions from all three days are being summarized and a detailed research agenda (derived from the meeting's deliberations) is being compiled. The symposium papers will also be collected in a larger volume. For additional information about the conference or these upcoming publications please contact:

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